

# Discrepancies in Publication Rates of BMJ Letters: Why are Ethnic Minority Authors Less Likely to get Published and What Does it Mean for Patients?

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## Introduction

Since 1998, the BMJ website has featured “rapid responses” which enable people of all backgrounds, including patients, to critique, debate, and reply to articles.

A selection of rapid responses is published formally as letters in the BMJ and indexed in PubMed.

We sought to identify whether author ethnicity affected the probability of a rapid response being published in the BMJ.

## Methods

113,866 rapid responses from 1998 to 2018 were analysed, of which 8,440 were published as letters.

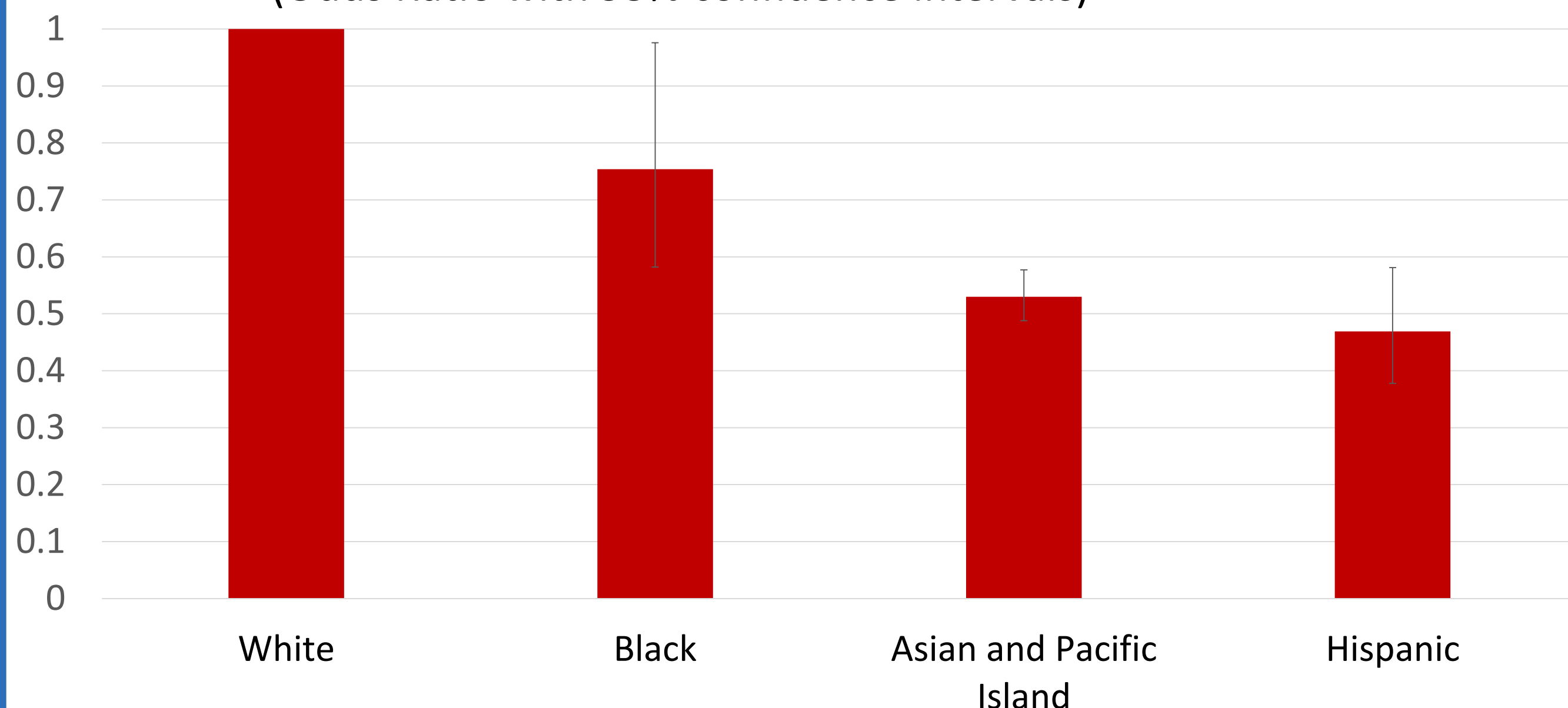
We used logistic regression to calculate whether the odds of a rapid response being published differed by author ethnicity, taking into account author gender and various features of the rapid response (see right).

The logistic regression was carried out in ??? Software

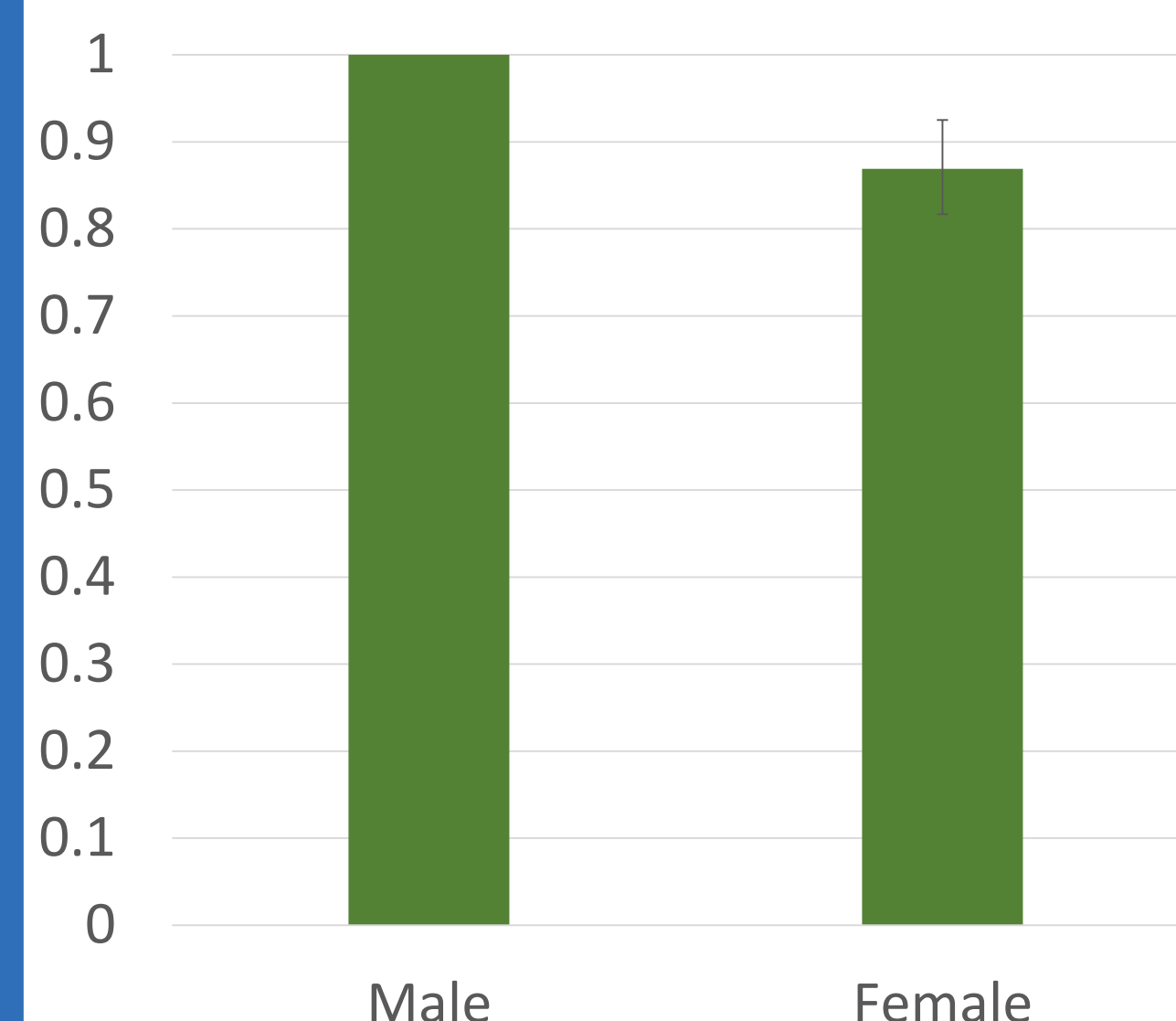
## Predictor variables

- Ethnicity of first named author, categorised by a machine learning model into four groups [2].
- Gender of first named author (male or female), categorised by an open source database [1].
- Presence of references.
- Presence of a linked twitter address.
- Presence of competing interests.
- Presence of multiple authors.

Odds of Publication by First Author Ethnicity (Odds Ratio with 95% confidence intervals)



Odds of publication by First Author Gender (Odds Ratio with 95% CI)



## Results

- Authors were predominantly white (83%) and male (62%).
- Rapid responses where the first author had a white name were more likely to be published than those with black (OR 0.727, 95%CI ???), Asian and Pacific Island (OR 0.619, 95%CI ???), or Hispanic names (OR 0.594, 95%CI ???) ( $p < 0.05$ ).
- Rapid responses with female first authors were less likely to be published than those with male first authors (OR 0.822, 95% CI ;  $p < 0.001$ )

## Discussion

Within the UK's National Health Service (NHS), 46% of all medical and dental staff are from non-white ethnic groups [3]. The fact that this large cohort of medical professionals is under-represented in literature has implications for the quality of literature that gets published. It deprives the BMJ's audience of opinions and insights of ethnic minority authors, leading to a less representative evidence base that may be detrimental to care of patients from all ethnicities.

## References

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2. Junting Ye, Shuchu Han, Yifan Hu, Baris Coskun, Meizhu Liu, Hong Qin and Steven Skiena. [Nationality Classification using Name Embeddings](#). CIKM, Singapore, Nov. 2017, pp. 1897-1906.
3. NHS Employers. Ethnicity in the NHS [Internet]. [www.nhsemployers.com](http://www.nhsemployers.com). 2017 [cited 2018 Apr 23]. Available from: [http://www.nhsemployers.com/~media/Employers/Publications/Ethnicity in the NHS.PDF](http://www.nhsemployers.com/~media/Employers/Publications/Ethnicity%20in%20the%20NHS.PDF)